

**AP09230BT-N****Polyclonal Antibody to HA Epitope Tag (YPYDVPDYA) - Biotin**

<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml (by UV absorbance at 280 nm)
<b>Background:</b>	Epitope tags are short peptide sequences that are easily recognized by tag-specific antibodies. Due to their small size, epitope tags do not affect the tagged protein's biochemical properties. Most often sequences encoding the epitope tag are included with target DNA at the time of cloning to produce fusion proteins containing the epitope tag sequence. This allows anti-epitope tag antibodies to serve as universal detection reagents for any tag containing protein produced by recombinant means. This means that anti-epitope tag antibodies are a useful alternative to generating specific antibodies to identify, immunoprecipitate or immunoaffinity purify a recombinant protein. The anti-epitope tag antibody is usually functional in a variety of antibody-dependent experimental procedures.
<b>Host / Isotype:</b>	Rabbit / IgG
<b>Immunogen:</b>	9-aa epitope tag peptide YPYDVPDYA (11 114-122) from hemagglutinin influenza conjugated to KLH using maleimide <b>Remarks:</b> A residue of cysteine was added to the carboxy terminal end to facilitate coupling.
<b>Format:</b>	<b>State:</b> Liquid sterile filtered Ig fraction <b>Purification:</b> Affinity chromatography <b>Buffer System:</b> 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2; 10 mg/ml Bovine Serum Albumin (BSA) IgG and Protease free; 0.01% (w/v) Sodium Azide <b>Label:</b> Biotin – Biotinamidocaproate N-Hydroxysuccinimide Ester (BAC) <i>Molar Ratio:</i> 10-20 BAC molecules per Rabbit IgG molecule <b>Reconstitution:</b> Restore with 0.1 ml of deionized water (or equivalent).
<b>Applications:</b>	ELISA: 1:15,000 - 1: 150,000. Immunohistochemistry on paraffin sections: 1:250. Immunoprecipitation: 1:250. Western blot: 1:10,000 (In western blotting of bacterial extracts the antibody does not cross-react with endogenous proteins). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	The antibody recognizes the HA epitope tag fused to the amino- terminus of targeted proteins as is expressed in many commonly used expression vectors. It is directed against the HA motif and is useful in determining its presence in various assays. Anti-HA tag antibody detects over-expressed proteins containing the HA epitope tag. To date this antibody has reacted with all HA tagged proteins so far tested. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-biotin and anti-Rabbit Serum.

**Storage:**

Store vial at 2-8 ° C prior to restoration. Following restoration product can be stored undiluted at 2-8 ° for up to one month or (in aliquots) at -20 °C or below. For extended storage add glycerol to 50%.

Avoid repeated freezing and thawing. Centrifuge product if not completely clear after standing at room temperature.

Shelf life: One year from despatch.

**General Readings:**

(Conjugation) Bayer & Wilchek Methods in Enzymology 184; 138-160, 1990.

**Pictures:**

Anti-HA epitope tag polyclonal antibody detects HA tagged recombinant proteins by western blot. Polyclonal rabbit-anti-HA epitope tag at a 1:10,000 dilution was used to detect 1.0 µg of recombinant transcription factor protein containing the HA epitope tag. A 4-20% gradient gel was used to separate the protein by SDS-PAGE. The protein was transferred to nitrocellulose using standard methods. After blocking the membrane was probed with anti-HA tag antibody for 1 h at room temperature followed by washes and reaction with a 1:4000 dilution of IRDye(TM)800 conjugated Gt-a-Rabbit IgG [H&L] for 30 min at room temperature. LICOR's Odyssey® Infrared Imaging System was used to scan and process the image. Other detection systems will yield similar results.

